



## GATEWAY CITIES

COUNCIL OF GOVERNMENTS

*Artesia**Avalon**Bell**Bellflower**Bell Gardens**Cerritos**Commerce**Compton**Cudahy**Downey**Hawaiian Gardens**Huntington Park**La Habra Heights**La Mirada**Lakewood**Long Beach**Lynwood**Maywood**Montebello**Norwalk**Paramount**Pico Rivera**Santa Fe Springs**Signal Hill**South Gate**Vernon**Whittier**County of Los Angeles**Port of Long Beach*

December 12, 2012

John Faust

Office of Environmental Health Hazard Assessment

1515 Clay Street, Suite 1600

Oakland, CA 94612

Subject: Gateway Cities Concerns Regarding CalEnviroScreen  
Proposed Screening Tool

Dear Mr. Faust:

Thank you for taking the time to meet with city representatives from the Gateway Cities and other regions of Southern California regarding the proposed CalEnviroScreen impact screening tool.

In addition to the concerns expressed in our letter of October 16, 2012, the Gateway Cities would like to offer the comments discussed below. The Gateway Cities COG is a joint powers authority representing 27 cities in Southeast Los Angeles County, as well as unincorporated communities of Los Angeles County. Our diverse communities total about 2 million residents, including many minority and low-income residents. The COG's mandate on behalf of its members includes improving transportation, air quality, housing and economic development.

The Gateway Cities are collaborating on a number of studies related to the community impacts of transportation throughout our region. Of particular note is the Air Quality Action Plan (AQAP), which is in the process of being completed within the next few months. The AQAP is a unique effort that analyzes the existing air quality (2009) and the future air quality (2035) based on measures already planned and then identifies additional (or new) measures to further improve air quality in the entire Gateway Cities area. The AQAP includes an unprecedented detailed health risk assessment for

all sources, including mobile, area, and stationary, in the Gateway Cities COG region, which is broken down for each city for each type of pollutant and pollution source. Preliminary results of this work indicate that the air quality improvement measures planned for this region will substantially reduce health risk and public health impacts between now and 2035.

Another significant local air quality-related effort is the Gateway Cities Sustainable Communities Strategy (SCS), which was developed in 2011 under Senate Bill 375. One of only two sub-regional SCS's created in the state, the Gateway Cities SCS combined the plans of our local jurisdictions to demonstrate that jointly, we would reduce greenhouse gas emissions to a greater extent than required for the SCAG region by 2035.

In several cases the CalEnviroScreen tool relies on assumptions based on county-wide data, instead of specific data. For example, asthma, cancer rates and heart disease rely on county-wide data, which is generalized to Census Tract data. Also the tool mixes apples to oranges to pears, when relying on ZIP Code, Census Tract and county-wide data in categories like Public Health.

Now that OEHHA is aware of the Gateway Cities AQAP, we respectfully request that, in developing the CalEnviroScreen tool, OEHHA recognize that the Gateway Cities have invested in a sophisticated, credible analysis of public health impacts and that that tool should be used whenever it is available instead of using county-wide data. Therefore, the tool should include a process to allow for adjustments based on the submission of more sophisticated local data, where available. The AQAP is focused on the key public health concern of our residents, namely air quality, and is scientifically based on locally collected data that reflects conditions specific to our area. It also recognizes that certain pollutants impact everyone living and working in the greater Gateway Cities area and that these health effects are not limited only to disadvantaged communities. The AQAP assesses specific Environmental Justice impacts which we know will be of interest to OEHHA. Attached please find a recent presentation describing and summarizing the AQAP. Although this is a work in progress, the presentation shows the extent of the cities' effort and how it could help OEHHA accomplish its goal.

Finally, we wish to express our continued concern regarding the potential relationship of the CalEnviroScreen tool to the CEQA process and requirements. The tool appears to be created so that it does not place legal obligations on State agencies to conduct additional cumulative analysis for rulemaking. We respect this decision, since State has been subjected to unwarranted CEQA litigation at times. However, it is very unclear at this point if the CalEnviroScreen tool will be used to subject local government planning and programs to new and unwarranted litigation. Unless the program is carefully crafted, the tool may open up local government to third-party litigation and regulatory agency fines and enforcement actions.

We also continue to be concerned that the model could be used to delay transportation projects and other investments that would otherwise bring benefits to the communities where they are located. For example, the model could be used to identify "impacts" based on the statewide databases used in the tool, unrelated to actual local data such as that used in our AQAP or SCS. These "unrelated" impacts would have to be mitigated in order to allow worthwhile projects to proceed, based on the generalized approach taken in the CalEnviroScreen Proposed Screening Tool.

A related concern is that as currently proposed, the model would produce high impact scores for communities with high concentrations of poverty. High scores could result in additional mitigation requirements that would discourage projects that could help residents, such as affordable housing development, transportation congestion relief projects, or zero emission transportation projects.

We have a number of specific technical and policy questions related to the proposed screening tool. These are presented in Attachment 2. We look forward to your detailed responses.

We share your goal of directing funding to communities that need assistance in addressing undesirable public health impacts. We also recognize that all Californians will benefit from improvements in the environment. The Gateway Cities COG looks forward to working with you further on constructive measures to identify and reduce these impacts in our communities. We would be happy to provide further details regarding our AQAP, SCS, and related studies.

Sincerely,

A handwritten signature in blue ink that reads "Richard R. Powers by jmg". The signature is written in a cursive, flowing style.

Richard Powers  
Executive Director

Enclosure

cc: Board of Directors, Gateway Cities COG

City Managers' Steering Committee, Gateway Cities COG



# Step 1 - How did we get here?

Ultrafines Research

Near Roadway Modeling

Construction Staging and Phasing

Community Medical Needs Assessment

Health Impact Assessment

Compendium Update

Air Quality Modeling

Health Risk Assessment

Hotspot Analysis

Early Action Plan

New Measures



# Summary of AQAP Work to Date

## I-710 Corridor Studies – Ultrafines Research

### Summary

- Ultrafine particles are significantly elevated in near-roadway env & linked to adverse health effects
- Characterization of ultrafine particles, especially their number concentration, have tech challenges
- Heavy-duty diesel trucks are the largest emitters of ultrafine particles.
- # concentration elevated near freeways & drop exponentially to urban background at 300-m.
- Penetrate efficiently into indoor environments
- AQMD is studying ultra fines as part of the MATES-IV study (I-710 )

### Key Lessons

- Development of standardized measurement protocols is the most essential next step towards regulatory application for regulatory monitoring instruments
- Ultrafine emission factors are not well characterized for vehicles (both gas and diesel)
- Residents and commuters in the vicinity of freeways:
  - Particles penetrate efficiently into residences downwind near freeways – natural ventilation
- US no tailpipe standard but has been adopted but have been in Europe (Euro-5 – Sep 11)
- More research is required to understand ultrafine impacts and control measures.
- Future ultrafines could be reduced using zero-emission vehicles such as EVs.



# Summary of AQAP Work to Date

## I-710 Corridor Studies – Near Roadway Modeling

### Summary

- Assessed the ability of microscale air dispersion models to return results similar to monitored air quality in the near-roadway
- Air dispersion model tends to under-predicts CO and over-predicts NO<sub>x</sub> concentrations.
- Using std TDM output correlation is poor between data paired in time and space for predicted and observed concentrations.
- Largest uncertainties are the use of average traffic volumes, fleet mix of vehicles and to a lesser degree meteorology.

### Key Lessons

- The largest improvements in matching modeled to monitored conditions would come from reducing uncertainties in
  - On-site speed profile vs. average speed “driving cycle”
  - Actual fleet mix (trucks/cars) vs. average weekday fleet
  - Actual meteorology vs. nearest AQMD monitoring site N. Long Beach meteorology
- Install permanent monitoring stations along the I-710 as an early action project (traffic volume, met and air quality) – provides a quantifiable way of documenting air quality improvement
- Use of weigh-in-motion data improved M-M significantly over simple 4-period traffic activity profile



# Summary of AQAP Work to Date

## I-710 Corridor Studies – Construction Staging and Phasing

### Summary

- Only NOx and PM show exceedance of AQMD regional significance thresholds
  - Most problematic is along one 2-mile segment of the 16-mile corridor (up to 36 months for PM-10)
- PM2.5 and PM10 from diesel emissions (associated with construction equipment exhaust) do not exceed the AQMD regional thresholds of significance.
- Exceedances are generated primarily by fugitive dust from construction activities.

### Key Lessons

- Analysis is developed for each segment and changes at the local scale
  - Phase construction over longer time period to minimize periods of high emissions
- More frequently watering over longer time period, minimize track-out and use of surfactants minimize PM. In addition, implement BMPs (e.g., cover stockpiles with tarps).
- LA Metro “Green Construction Policy” could reduce PM and NOx emissions by up to 44% during early construction period (2019-2020) and eliminate NOx exceed of sig threshold



# Summary of AQAP Work to Date

## Community Medical Needs Assessment (AQ component)

### Summary

The objectives of the CMNA are to profile the existing health conditions, assess the effectiveness of medical care, and assess future community medical need in the Gateway Cities. Health conditions and medical need are characterized in the CMNA by a select set of indicators related to:

- Health outcomes;
- Factors that contribute to population health (e.g., access to and quality of medical care);
- The effectiveness of existing medical care; and
- Health resources available to the communities in the study area.

Results for GCCOG region were compared to LA County.

### Key Lessons

#### Specific findings:

- Income is one of the strongest predictors of health.
- 12 of 26 cities poverty levels greater than LA County
- 65% of GC below LA County median income.

#### General result:

- GC health outcomes are on par with LA County
- Many health indicators for GCCOG cities are below LA County average. However, results are not consistent for all health impacts, regions, and demographic groups.
- Medical facility (health clinics) availability in GCCOG region is comparable to LA County as a whole.



# Summary of AQAP Work to Date

## Health Impact Assessment

### Summary

A qualitative comparison of several I-170 alternatives against six health determinants: **mobility, air quality, noise, traffic safety, jobs and economic development, and access to neighborhood resources.**

- For each impact, provided background information, detailed evaluation for several key categories, and provided recommendations for further improvement.
- Report work product was released and forwarded for consideration in the EIR/EIS. Currently considering a peer review with NAS.

### Key Lessons

Findings:

- **Health would improve under all alternatives for most of the health determinants.**
- **AQ – All four of our Toolkit Pollutants are below 2008 baseline**
- **All Health Outcomes and scenarios show improvement**
- Negative impacts related to noise and traffic safety.
- Health of populations living away from the freeway would be expected to improve, while there will be less improvement near the freeway.
- Suggests there are negative impacts from reduced mobility.



# Summary of AQAP Work to Date

## Compendium Update

### Summary

- Reviewed suggested emission control measures listed in the March 2006 *Compendium of Existing and Proposed Near-Term Air Quality Improvement Strategies for the I-710 Corridor* (Compendium).
- Conducted research on status of each Compendium measure by reviewing regulatory documents, air quality plans, and other materials. Conducted telephone interviews with the staff at the Port of Long Beach and the Port of Los Angeles.
- Concluded that, of the 154 measures listed in the original Compendium:
  - 106 have been fully implemented.
  - 31 have been partially implemented.
  - 17 have not been implemented

### Key Lessons

- The vast majority of emission control measures suggested by stakeholders in the period 2002 - 2007 have now been implemented. All transportation sectors now have stringent emission controls, although slow fleet turnover (except for drayage trucks at the ports) will delay full effects for at least 20 years.
- For most transportation emissions sources, traditional control approaches will be reaching maximum effectiveness. Further reductions will require transition to alternative fuel/power sources (e.g., electrification).



# Summary of AQAP Work to Date

## Air Quality Modeling & Analysis

### Summary

- DPM emissions decrease between 2009 to 2035 by 70% despite 12% VMT growth
- Largest decrease in DPM is from changes in off-road vehicles
- CA PM2.5 air quality standard is achieved by 2035 with the exception of the South Gate, Bellflower and a portion of Downey; all GC areas below federal PM2.5 standard
- Charbroiling is the biggest contributor to primary PM2.5 concentrations
- Only other 2035 NAAQS exceedance in GC is for 1-hr NO2 in South Gate. Rest of GCCOG meets standards.
- Annual DPM concentrations are higher than average in Commerce, East LA, Wilmington, Maywood, Norwalk, and Santa Fe Springs

### Key Lessons

- There are significant variation in emissions across the GC – air quality impacts strongly dependent on this variation – particularly for point source dominated emissions
- One strategy will not work equally everywhere – significant variations in emission across the GC.
- Tailored strategies to individual communities and pollutants may be more effective
- Measures targeting secondary PM2.5 precursor emissions maybe helpful
- Pollutants identified to be present in 2035 will be addressed by the AQAP



# Summary of AQAP Work to Date

## Health Risk Assessment

### Summary (“new terms” should be more relatable)

- 2035 cancer risk 68% lower than 2009 (70% from DPM, 9% from arsenic and 11% from chromium-6)
- 2035 chronic non-cancer respiratory health risk (e.g., chronic bronchitis, asthma) above level of concern for less than 1% of GC population; down from 35% in 2009.
- 2035 chronic non-cancer developmental health risk (e.g. stillbirths) above level of concern for all of GC population, slightly higher than 2009
  - Virtually all from arsenic, including non-inhalation pathways (e.g., ingestion of soil and home garden produce)
- 2035 acute non-cancer developmental health risk above level of concern for ~3% of GC population mostly in Maywood and Huntington Park (Virtually all from arsenic)
- 2035 PM2.5 mortality risk 58% lower than 2009
  - About half from secondary (regional) sources, 24% from onroad exhaust and dust, 24% from area sources.



# Summary of AQAP Work to Date

## Health Risk Assessment cont.

### Key Lessons

- 2035 cancer risk fairly uniform across GC, but highest in Commerce, East LA, Maywood, and Sante Fe Springs.
  - Little evidence of disproportionate impacts on disadvantaged populations (minority, low education, limited English, below poverty level, younger than 18, older than 65)
  - 2009 risk similar, but somewhat higher than LA County average
  - Reduced risk in 2035 would make GC similar to current values in other major urban areas (e.g., San Francisco, Dallas, Boston, Houston, Chicago)
- Reduced DPM concentrations in 2035 would be associated with reduced asthma risk
- 2035 chronic and acute non-cancer developmental health risks vary substantially across GC with highest risk in Maywood and Commerce
  - Evidence of disproportionate impacts on low education and limited English populations
- Chromium-6 concentrations and cancer risk are likely overestimates
- 2035 PM2.5 mortality fairly uniform across GC with highest risk in Bellflower, Norwalk, and Paramount.
  - Risk below the level associated with NAAQS and generally with the CAAQS. Little evidence of disproportionate impacts



## **ATTACHMENT 2 TO GATEWAY CITIES COG LETTER OF 12/12/12 TO OEHHA**

### **California Communities Environmental Health Screening Tool (CalEnviroScreen)**

#### **Gateway Cities Review of the Draft – December 2012**

- 1) The tool relies on existing environmental, health and socio economic data to create a cumulative impacts score for communities across the state. What are the sources of the existing data? Does the tool allow for additional local or regional data to be added? Why is a cumulative impact score developed? Would one environmental factor (e.g., air quality) be sufficient to trigger funding?
- 2) What are the statutory mandates and programs that would be subject of the screening tool? How would the tool be used by the State?
- 3) The tool is not intended to create a legal obligation by State agencies to conduct additional detailed cumulative analysis for rulemaking. What legal obligations does the tool create for local governments in their planning and programs? Does the tool open up local government to third-party litigation or regulatory agency fines and enforcement actions?
- 4) The definition of cumulative impacts in CalEnviroScreen is significantly different from the definition in CEQA (Page 2).
- 5) The scoring weights to five components (Exposure, Environmental Effects, Public Health Effects, Sensitive Populations and Socioeconomic Factors). Please explain how the weighting works (Page 3)
- 6) Geographic scale – ZIP Code, Census Tract or County based. How compatible is the statewide data to ZIP Codes and Census Tracts? In small communities, even Census Tracts may be too large and contain a variety of socio-economic, environmental and other factors that need to be addressed. Does the model only rely on statewide data? (page 4)
- 7) Why should indicators represent “widespread concerns related to pollution in California?” What are considered “widespread concerns”? (Page 5)
- 8) Pollution sources are ozone, PM2.5, traffic density, toxic releases from facilities, pesticide use and drinking water (which is under development). Is there a magnitude of range in these pollution sources? For example, what is meant by “traffic density”? (Page 6)
- 9) Public Health Factors are low birth-weight infants, asthma, cancer and heart disease. Are statistics readily available based on ZIP Codes or Census Tracts on these public health factors? (Page 6)
- 10) Environmental Effects Indicators are clean-up sites, impaired water bodies, leaking underground storage sites and clean-ups, solid waste facilities and hazardous waste

## ATTACHMENT 2 TO GATEWAY CITIES COG LETTER OF 12/12/12 TO OEHHA

facilities. Does the presence of one of these in your community downgrade the entire community? For example, is having a municipal waste transfer facility in your community an environmental indicator of health issues in your community? (Page 7)

- 11) Pesticide use appears to focus on agricultural, railroad and county uses for parks. Was household use of pesticides considered? (Page 16)
- 12) It appears that the State's data was taken from ZIP Code data. (See Toxics Release from Facilities). Can we request more detailed reports from the State based on a list of the ZIP Codes in the Gateway Cities? The toxics section includes air and water releases. What information are these releases based on? (Page 18)
- 13) Traffic density is considered a factor but the model was based on major roadways statewide. We would need to see what roadways were modeled in the Gateway Cities. The model assigned health impacts based on a 2,500 meter buffer zone. How was the size of the buffer zone chosen? What studies back up this finding? (Page 20)
- 14) Asthma (Page 24) – Several assumptions were made to determine asthma impacts – including providing the countywide average for ZIP Codes without data.
- 15) Cancer Rates (Page 26) – The report used all cancer rates. Does this then assume that all cancers are caused by environmental factors? All data was collected on a county-wide basis. How accurate is this methodology?
- 16) Heart Disease (Page 28) – This data is also reported on a county-wide basis. Is this approach accurate?
- 17) The Public Health Effects Component Scores for the Gateway Cities appears to be 2-3 out of 5 (Page 33). Is it accurate to combine countywide data with ZIP Code data?
- 18) Clean-Up Sites (Page 34) was based on information provided by DTSC on site cleanups. These include Superfund, corrective action, voluntary clean-up, historical and military sites (among others). The report indicates that each site in a ZIP Code was reviewed and assigned a ranking on a weighted scale of 2-12. It would be interesting to see the actual data on each ZIP Code, since DTSC information can be outdated and inaccurate. Several of the ZIP Codes in the Gateway Cities were assigned clean-up sites of 48-80 and some with more than 80 clean-up sites (the highest category).
- 19) Solid Waste Sites and Hazardous Waste Facilities (Page 40) – The report assumes that all of these sites create environmental hazards (odors, vermin, increased truck traffic, among others). No credit is given to a properly mitigated operation. For example, the EDCO Transfer Facility in Signal Hill has all trucks powered by compressed natural gas.